Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A multifunction ~~device~~ system comprising:

an image output unit that has an image signal input unit capable of receiving an optical signal, and outputs an image according to an optical signal inputted from the image signal input unit, the image signal input unit being integral with, or directly fixed to, the image output unit;

a first functional unit that has a first optical signal output unit capable of outputting an optical signal and outputs the optical signal according to a first function through the first optical signal output unit, the first optical signal output unit being integral with, or directly fixed to, the first functional unit;

a second functional unit that has a second optical signal output unit capable of outputting an optical signal and an optical signal input unit capable of receiving an optical signal, and outputs an optical signal according to a second function through the second optical signal output unit, and receives an optical signal inputted through the second optical signal input unit, the second optical signal output unit and the optical signal input unit both being integral with, or directly fixed to, the second functional unit; and

a distribution-type optical signal transmission medium to which the image signal input unit, the first optical signal output unit, the second optical signal output unit, and the optical signal input unit are connected, and which distributes an optical signal outputted from at least the first optical signal output unit to the image signal input unit and the optical signal input unit, and transmits an optical signal outputted from the second optical signal output unit to the image signal input unit.

2. (Currently Amended) The multifunction ~~device~~system according to claim 1, wherein the first optical signal output unit and the second optical signal output unit include a unit that generates plural optical signals of different types, and the image signal input unit and the optical signal input unit include an extraction part that extracts an optical signal of a specific type from inputted optical signals.

3. (Currently Amended) The multifunction ~~device~~system according to claim 2, wherein the plural optical signals of different types are optical signals with different intensity levels.

4. (Currently Amended) The multifunction ~~device~~system according to claim 2, wherein the plural optical signals of different types are optical signals with different wavelengths.

5. (Currently Amended) The multifunction ~~device~~system according to claim 2, wherein the plural optical signals of different types are optical signals with different timings of output to the distribution-type optical signal transmission medium.

6. (Currently Amended) The multifunction ~~device~~system according to claim 2, further comprising:

an arbitrating part that arbitrates the respective communications of the image output unit, the first functional unit, and the second functional unit by specifying the types of optical signals to be outputted by the first optical signal output unit and the second optical signal output unit, and the types of optical signals to be extracted by the image signal input unit and the optical signal input unit.

7. (Currently Amended) The multifunction ~~device~~system according to claim 1, wherein the distribution-type optical transmission medium comprises a diffusion part that diffuses an inputted optical signal.

8. (Currently Amended) The multifunction ~~device~~system according to claim 1, wherein the image output unit comprises a printer, the first functional unit comprises an image reading ~~device~~system, and the second functional unit comprises at least a storage part that stores a signal inputted from the optical signal input unit,

wherein the first functional unit outputs an optical signal in accordance with an image to be printed; the second functional unit stores in the storage part a signal according to the optical signal inputted through the optical signal input unit, and outputs the optical signal in accordance with the image through the second optical signal output unit; and the image output unit prints the image according to the optical signal inputted from the second functional unit through the image signal input unit.

9. (Currently Amended) The multifunction ~~device~~system according to claim 1, further comprising:

a third functional unit having a third optical signal output unit, the third optical signal output unit outputting an optical signal according to a third function to the distribution-type optical signal transmission medium,

wherein the first functional unit outputs an optical signal to the image output unit through the first optical signal output unit, and the third functional unit transmits an optical signal to the second functional unit through the third optical signal output unit.

10. (Currently Amended) The multifunction ~~device~~system according to claim 1, wherein the distribution-type optical signal transmission medium has a plurality of input ports and a plurality of output ports, and an input from one of the plurality of the input ports is transmitted to the plurality of output ports.

11. (New) The multifunction system of claim 6, wherein the image signal input unit, the first optical signal output unit, the second optical signal output unit, and the optical signal input unit each comprises:

a communication request circuit communicatively coupled to the arbitrating part, and

the arbitrating part arbitrates, through the respective communication request circuit, the types of optical signals outputted or received by the image signal input unit, the first optical signal output unit, the second optical signal output unit, and the optical signal input unit.

12. (New) The multifunction system according to claim 11, wherein the image signal input unit and the optical signal input unit each further comprise:

a level selection circuit that indicates the intensity level of a signal to extract, the level selection circuit connected to the respective communication request circuit; and

a separation and extraction circuit that extracts a signal having the intensity level indicated by the level selection circuit, and

the first optical signal output unit and the second optical signal output unit each further comprises:

a level selection circuit that indicates the intensity level of an optical signal to be output, the level selection circuit connected to the respective communication request circuit; and

a level converting circuit that controls the intensity level of the optical signal to be output.

13. (New) The multifunction system according to claim 11, wherein the image signal input unit and the optical signal input unit each further comprises:

a wavelength selection circuit that indicates the wavelength of a signal to extract, the wavelength selection circuit connected to the respective communication request circuit; and

a separation and extraction circuit that extracts a signal having the wavelength indicated by the level selection circuit, and

the first optical signal output unit and the second optical signal output unit each further comprises:

a wavelength selection circuit that indicates the wavelength of an optical signal to output, the wavelength selection circuit connected to the respective communication request circuit; and

a wavelength converting circuit that controls the wavelength of the optical signal to be output.

14. (New) The multifunction system according to claim 11, wherein the image signal input unit and the optical signal input unit each further comprises:

a timing selection circuit that indicates the intensity level of a signal to extract, the timing selection circuit connected to the respective communication request circuit; and

a sampling circuit that extracts a signal having the timing indicated by the level selection circuit, and

the first optical signal output unit and the second optical signal output unit each further comprises:

a timing selection circuit that indicates the timing of optical signal to output, the timing selection circuit connected to the respective communication request circuit; and

a buffer circuit that controls the timing of the optical signal to be output.